AIR WAR COLLEGE

AIR UNIVERSITY

GETTING THE WARFIGHTER WHAT THEY NEED AND WHEN THEY NEED IT

by

Carl E. Schaefer, Lt Col, USAF

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Contents

Illustrations

Page

Biography

COLONEL (select) CARL SCHAEFER

Lieutenant Colonel Carl Schaefer is currently a student at Air War College at Maxwell AFB, AL. He was commissioned a Second Lieutenant in the Air Force on May 30, 1990 with a Bachelor of Science in Engineering Sciences. Lieutenant Colonel Schaefer graduated from Undergraduate Pilot Training at Williams AFB, AZ, and was assigned to Vance AFB, OK, as a T-38 Instructor Pilot and Check Pilot. In the fall of 1995, he was selected as an Air Liaison Officer to the 2nd Infantry Division at Camp Casey, Korea. Following this remote tour, Lieutenant Colonel Schaefer was assigned to Seymour Johnson AFB, NC, for F-15E training. After graduating F-15E training, Lieutenant Colonel Schaefer served at Royal Air Force Lakenheath, England. As an F-15E instructor pilot and mission commander, he flew 38 combat missions in support of OPERATIONS DENY FLIGHT and ALLIED FORCE. Following his operational F-15E assignment, Lieutenant Colonel Schaefer was selected for USAF Test Pilot School (TPS) as a member of TPS Class 00A. Upon graduation from TPS, he remained at Edwards AFB, where he was an F-15 and T-38 test pilot in the 445th Flight Test Squadron and 416th Flight Test Squadron. During this time, Lieutenant Colonel Schaefer was a flight commander, F-15E smart weapons program pilot, chief T-38C test pilot and the Air Force Material Command F-15 Demonstration Pilot. In 2004, Lieutenant Colonel Schaefer attended the Air Force Institute of Technology for Intermediate Developmental Education earning a Masters of Science in Systems Engineering. Following school, he was assigned to Global Power Programs, Assistant Secretary of the Air Force for Acquisition, Pentagon, D.C. As the F-15 and F-22 Program Element Monitor, Lieutenant Colonel Schaefer was the Air Force budget and Congressional focal point for the procurement of these weapons systems. Following his Pentagon assignment, he took command of the 445th Flight Test Squadron and was the director of Test Operations Combined Test Force from 2006-2008, responsible for F-16, T-38, KC-135, and C-12 flight test and test support. After his command assignment, Lieutenant Colonel Schaefer was the deputy Group Commander for the 412th Operations Group, the largest Operations Group in the Air Force. Lieutenant Colonel Schaefer is a Command Pilot with over 2800 hours in 30 aircraft types. His decorations include the Meritorious Service Medal (2 OLC), Air Medal (3 OLC), Aerial Achievement Medal (1 OLC), Air Force Commendation Medal (3 OLC), Army Commendation Medal, the National Defense Service Medal (2 OLC), the Kosovo Campaign Medal, Global War on Terror Service Medal and the Korean Defense Service Medal.

Introduction

In 1981, the Air Force completed the requirements for the Advanced Tactical Fighter (ATF) and began the longest fighter aircraft acquisition program in history. The ATF was to replace the F-15, 13 years old at the time, and counter the proliferation of Soviet Su-27 advanced fighter planes. Ten years later, in 1991, Lockheed's ATF prototype the YF-22 won the fly-off competition against Northrop Grumman's YF-23. The initial program called for 750 F-22s to be Initial Operational Capable (IOC) in 1995.[1] Following the fly-off, and 14 more years of development, the F-22A became IOC with twelve aircraft in December 2005, 10 years later than desired. Twenty-four years of acquisition developed the most capable and complex fighter in the world, but the schedule and cost overruns contributed to the Air Force being authorized to procure 187 of the 750 required to replace the F-15.

Almost 25 years after the initial ATF requirements, Marine commanders developed the requirements for the Mine Resistant Ambush Protected (MRAP) vehicle in 2005.[2] This vehicle was developed to stem the horrific affects from improvised explosive devices (IEDs), accounting for 75% of all U.S. casualties in Iraq and Afghanistan.[3] Using streamlined acquisition processes, the MRAP became IOC in 2007, 33 months after identifying the need.[4] As of July 2009, 16,204 MRAP vehicles have been produced and over 13,000 have been fielded.[5]

Although it is unfair to compare the F-22 and MRAP vehicle acquisitions based upon weapon system complexity, urgent need, streamlined acquisition processes, and supplemental

[1] James Rothenflue and Marsha Kwolek, "Streamlining DoD Acquisition: Balancing Schedule with Complexity," (Maxwell AFB, AL: Air University, 2006), 32.
[2] United States Government Accounting Office, "Defense Acquisitions: Rapid Acquisition of MRAP Vehicles," Congressional Testimony, 8 October 2009, GAO-10-155T, 1.
[3] Ibid., 1.
[4] Ibid., 6.
[5] Ibid., 6.

Congressional funding, the MRAP example clearly points to the government's ability to quickly procure military weapon systems when required. These rapid acquisition processes are slowly being institutionalized throughout the services to meet urgent needs for our warfighters in the face a rapidly evolving threat.

Currently, each service and combatant command has their own rapid acquisition process. The Defense Science Board completed a study in July 2009, which stated, "Current approaches to implement rapid responses to urgent needs were found to be unsustainable, and institutional barriers—people, funding, and processes—are power inhibitors to successful rapid acquisition and fielding of new capabilities."[6] The study found rapid acquisition processes should be based on proven technology to deliver capability to the warfighter within two to twenty-four months. The study also recommended, "DoD should establish a streamlined, integrated approach for rapid acquisition." Finding a rapid acquisition standard for all services is the focus this paper.[7]

My thesis is Special Operations Command's (SOCOM) rapid acquisition process offers a rapid acquisition benchmark, which should be adopted throughout the military. SOCOM's rapid acquisition process could be used to acquire a limited major weapon system (e.g. a light attack aircraft) in less than two years.

I. Deliberate and Rapid Acquisition—What's the Difference?

When people think of Department of Defense (DoD) acquisition processes, they are generally thinking about deliberate acquisition. Programs like B-2, F-22, F-35, and the Army's Future Combat System come to mind. These large programs take years and billions of dollars to develop. Many don't survive the cost overruns and schedule delays associated with these

[6] Defense Science Board Task Force Report, "Fulfillment of Urgent Operational Needs," July 2009, iii.
[7] Ibid., xii.

programs. In May of 2009, Defense Secretary Gates announced the cancellation of the VH-71 presidential helicopter, the Air Force Combat Search and Rescue X program, ground components of the Future Combat System, and missile defense's Multiple Kill Vehicle.[8] Secretary Gates stated the root causes for the cancelations were immature technology and unnecessary requirements, which led to cost and schedule overruns and fewer quantities procured.[9]

The 2009 Defense Science Board Study (DSB) stated, "Over the course of the wars in Iraq and Afghanistan, it became apparent that U.S. forces were not adequately equipped for ongoing stability or counter insurgency operations."[10] The DSB report also noted, "The reality is that the Department is not geared to acquire and field capabilities in a rapidly shifting threat environment."[11] The deliberate acquisition process was not developed to handle urgent needs, so each service and combatant command developed their own processes. As a foundation for this paper the deliberate acquisition process and selected rapid acquisition processes will be discussed.

Deliberate Acquisition

Deliberate acquisition is governed by the Joint Capabilities Integration and Development System (JCIDS) for requirements, the DoD 5000 series of regulations for acquisition guidance,

[8] Moshe Schwartz, "Defense Acquisitions: How DOD Acquires Weapon Systems and Recent Efforts to Reform the Process," (Washington, D.C.: Congressional Research Service, 2000), 17.
[9] Ibid., 17.
[10] Defense Science Board Task Force Report, 2.
[11] Ibid., 4.

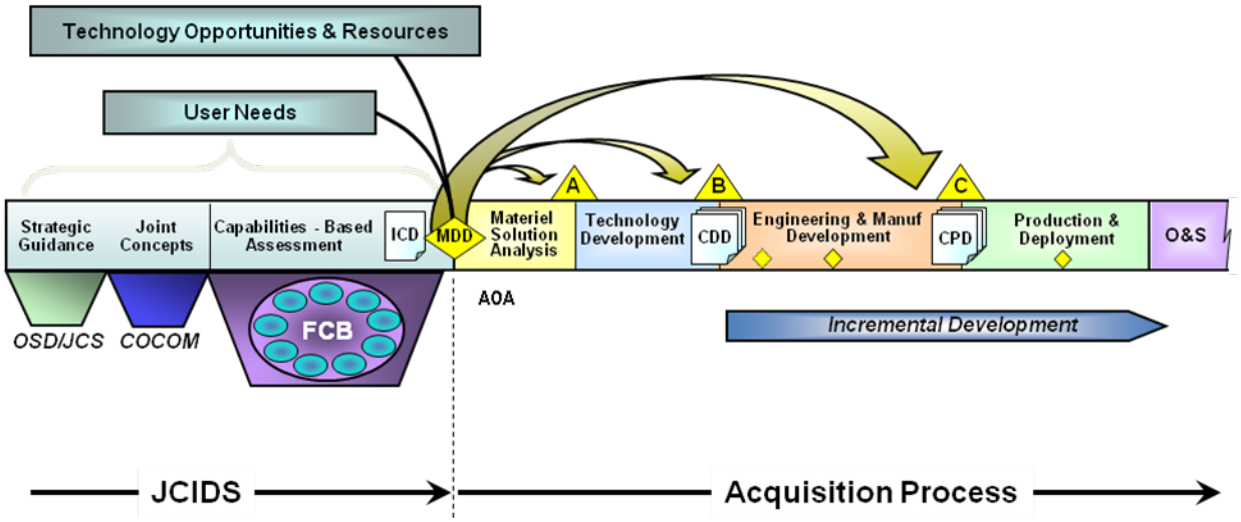


Figure 1: JCIDS/Acquisition Process

and the Planning, Programming, Budgeting and Execution (PPBE) for funding.[12] Details of each process are beyond the scope of this paper, but as shown in Figure 1 the JCIDS precedes the acquisition process to validate the joint capabilities required to counter current and future threats. Once a required capability is identified, a service (Army, Navy or Air Force) is designated to acquire the weapon system to meet the capability shortfall. To develop the system the designated service will request funding from Congress through the PPBE system.

According to the Congressional Research Service, "The PPBE is intended to provide Combatant Commanders the best mix of forces, equipment, and support within fiscal constraints; the PPBE develops DOD's proposed budget for all acquisitions."[13] Each service and combatant command plans and develops a 5-year program to fulfill their mission responsibilities. This 5-year plan is called the Program Objective Memorandum (POM) and is submitted to the Office of Secretary of Defense (OSD) for approval. Concurrent with the POM process, each service develops a Budget Estimation Submission (BES) to support the POM. The BES is submitted by

[12] Ibid, 4.
[13] Moshe Schwartz, "Defense Acquisitions: How DOD Acquires Weapon Systems and Recent Efforts to Reform the Process," 4.

each service to OSD. OSD then consolidates each services' BES for a DoD budget submission to the the President. Following Presidential approval, the budget is submitted to Congress for approval. Although this is a simplified explanation of the DoD's deliberate acquisition process, it is clear to see the multi-step process and review system to approve funding for a particular program.

In 1987, SOCOM was established to, "…oversee the training, doctrine, and equipping of all U.S. Special Operations Forces."[14] To meet the unique needs of special operations forces, SOCOM was granted certain exceptions to the deliberate acquisition system. Under provisions of Title 10 U.S. Code, Chapter 6, Section 167, "The commander of special operations command shall be responsible for, and shall have the authority to conduct, the following: development and acquisition of special operations-peculiar equipment and acquisition of special operations-peculiar material, supplies, and services."[15] No other combatant commander has been given direct Congressional authority to develop and acquire equipment for their forces. Under this law, SOCOM developed their own version of JCIDs, Special Operations Forces Capabilities Integration and Development System (SOFCIDS). SOFCIDS is a streamlined version of the JCIDs process, wholly owned by the SOCOM commander for SOF-particular acquisition. SOFCIDS reduces the requirements of JCIDs documents and streamlines the coordination process within the command. Even with SOCOM's acquisition exceptions, the deliberate process is unable to support the rapidly changing needs of the current warfighter. Based on these unique needs, each service and combatant command developed their own rapid acquisition

[14] United States Government Accounting Office, "Defense Acquisitions: An Analysis of the Special Operations Command's Management of Weapon System Programs," Congressional Testimony, June 2007, GAO-07-620, 1.

[15] *Title 10 Armed Forces*, CH. 6, SEC. 167, 4A, 8 January 2008.

process. For the scope of this paper the Army, Air Force, Navy, and SOCOM rapid acquisition processes will be discussed.

Rapid Acquisition

There are over 20 different urgent needs processes throughout the Department of Defense, Joint Staff, Combatant Commands and Services.[16] Each processes carries varying and overlapping definitions of rapid acquisition. This paper will discuss the documents, approval authority, funding, and timelines of the Joint, Army, Air Force, Navy, and SOCOM rapid acquisition processes.

Joint Rapid Acquisition

Joint rapid acquisition is centered on fulfilling a combatant commander's Joint Urgent Operational Need (JUON). A JUON addresses "…urgent operational needs that: (1) fall outside of the established Service processes; and (2) most importantly, if not addressed immediately, will seriously endanger personnel or pose a major threat to ongoing operations."[17] The governing regulation for Joint rapid acquisition is Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3470.01, dated 15 July 2005, which details the JUON process and provides an overview for each service's rapid acquisition process.[18] The timeline to deliver a JUON is normally 120 days to two years to provide the 70-80% solution.[19] If the material or logistics solution is needed in less than 120 days, the JUON is designated as an Immediate Warfighter Need (IWN) and handled by the Joint Rapid Acquisition Cell (JRAC) for oversight of the process.[20] The JRAC tracks the IWN and provides updates to the Deputy Secretary of Defense. The funding for an IWN has

[16] Defense Science Board Task Force Report, 9.
[17] Ibid., 10.
[18] Chairman of the Joint Chiefs of Staff Instruction 3470.01, *Rapid Validation and Resourcing of Joint Urgent Operational Needs (JUONS) in the Year of Execution*, 15 July 2005.

[19] William, Beasley, "Institutionalization of DOD Processes In Support of Immediate Warfighter Needs," Army War College Professional Student Paper, 11 August 2009, 10.
[20] Chairman of the Joint Chiefs of Staff Instruction 3470.01, A-5.

been sourced primarily from the Iraq Freedom Fund, which has been designated by Congress for the funding of the wars in Iraq and Afghanistan.[21] In contrast, there is no designated funding for a JUON, where the solution takes longer than 120 days. Funding for JUONs come from sources within the combatant command or a designated service. Funding approval for both the JUON and IWN comes from Budget Office Director's Board, co-chaired by the OSD comptroller and the J-8, Deputy for Resources and Acquisition.[22] Based on the nature of the JUON or IWN, the J-8 will designate a lead service to provide a material or logistic solution for the warfighter. The Army, Air Force, Navy and SOCOM rapid acquisitions processes will be discussed below.

Army Rapid Acquisition

The core of the Army rapid acquisition process is the Operation Needs Statement (ONS) process and the Rapid Equipping Force (REF). Army field commanders and combatant commanders submit an ONS to fulfill an "urgent need for a materiel solution to correct a deficiency or to improve a capability that impacts upon mission accomplishment."[23] The ONS is submitted via the Equipment Common Operation Picture (ECOP), an information technology tool. ECOP allows commanders to submit and track ONS documentation and approval of the capability.[24] The ONS is validated and authorized by Headquarters, Department of the Army (HQDA). If the cost of the material solution is expected to be under $100,000, commanders can submit a "10-liner" to the REF.[25] The Army established the REF in 2002 to rapidly respond to warfighter needs. The "10 liner" consists of the following:

1. Problem
2. Justification
3. System characteristics

[21] William Beasley, "Institutionalization of DOD Processes In Support of Immediate Warfighter Needs," 10.
[22] Chairman of the Joint Chiefs of Staff Instruction 3470.01, GL-2.
[23] Ibid., 12.
[24] William Beasley, "Institutionalization of DOD Processes In Support of Immediate Warfighter Needs," 2.

[25] Defense Science Board Task Force Report, 13.

4. Operational concept
5. Organizational concept
6. Procurement objective
7. Support requirements
8. Availability
9. Recommendation
10. Coordination accomplished.

The REF process is run by the Army G3 and solutions are normally approved by the Army Vice Chief of Staff. Commercial-off-the-shelf (COTS) solutions generally take 3-6 months to field, whereas new technology may take 12-18 months.[26] The REF and ONS do not have a specific funding source, but are normally funded through a number of Joint and Army research, development, test, and evaluation (RDT&E) funding, based on the material solution (e.g. robotic funding, IED funding). The goal of the Army rapid acquisition process is to quickly field the 80% solution to meet the warfighter's need versus waiting longer for the 100% solution.[27]

Air Force Rapid Acquisition

The Air Force's rapid acquisition process in entitled the Rapid Response Process (RRP) and is detailed in Air Force Instruction (AFI) 63-114, 12 June 2008. The RRP begins when a major command or combatant command identifies an urgent operational need (UON). The requirements of the UON are normally documented in a Combat Capability Document (CCD) and submitted to the Assistant Secretary of the Air Force for Acquisition (SAF/AQX), which serves as the focal point for the RRP. No specific funding exists for the RRP and sources are recommended by SAF/AQX and approved by the CSAF.[28] According to AFI 63-114, "Capability must be fielded in time to impact an ongoing conflict or a crisis (nominally within 60

[26] Ibid., 13.
[27] U.S. Army Rapid Equipping Force website, http://www.ref.army.mil/textonly/default.html#about.
[28] Air Force Instruction 63-114, *Rapid Response Process*, 12 June 2008, 3.

days of initial warfighter request)."[29] SAF/AQX represents the Air Force on the JRAC and the RRP is the process used when the Air Force is assigned the responsibility of fulfilling a JUON.

Navy Rapid Acquisition

The Navy's rapid acquisition is entitled the Urgent Needs Process (UNP) and is outlined in the Secretary of the Navy's Notice 5000, 12 Mar 2009. An urgent need is identified by a combatant commander, Navy commander, or Marine commander and defined as, "…an exceptional request from a Navy or Marine Corps component commander for an additional warfighting capability critically needed by operating forces conducting combat or contingency operations. Failure to deliver the capability requested is likely to result in the inability of units to accomplish their missions or increases the probability of casualties and loss of life."[30] The goal of the UNP is to provide the warfighter with a fielded solution in less than 24 months. Based on the technology readiness of the solution, the Navy employs a range of acquisition strategies to include: COTS/government-off-the shelf (GOTS) procurement; Rapid Deployment Capability for slightly modified COTS/GOTS; and Rapid Deployment and Development when no commercial solution is available.[31] The Chief of Naval Operations (CNO) is the approval authority for the UNP and the CNO staff is the focal point for the process. No separate funding exists for the UNP and funding sources are approved by the CNO. Similar to the other services, the UNP supports the JUON process when the Navy is designated as the lead service to field the JUON.

SOCOM Rapid Acquisition

SOCOM's rapid acquisition process consists of the Special Operations Forces Capabilities and Development System-Urgent (SOFCIDS-U). As described earlier, SOCOM is

[29] Ibid., 6.
[30] Secretary of the Navy Notice 5000, 12 March 2009.
[31] Secretary of the Navy Notice 5000, 12 March 2009, 5.

unique among combatant commands because Congress has granted SOCOM the ability to acquire their own solution to meet warfighter needs. SOCOM's rapid acquisition process is governed by U.S. SOCOM Directive 71-4, which states, "SOFCIDS-U may be used when a SOF unit, either deployed or during pre-deployment, identifies an urgent and compelling capability gap or requirement derived from combat survivability deficiency or risk to operational success."[32] SOFCIDS-U is initiated through the chain-of-command by a Combat Mission Needs Statement (CMNS). The CMNS process is well-defined in U.S. SOCOM Directive 71-4 and consists of defining the capability gap, environment, material approach, concept of operations and an analysis summary. Once the CMNS is submitted, a Rapid Response Team (RRT) is convened by SOCOM J-8 within 24 hours.[33] The RRT provides expeditious review and coordinates the solution and fielding of the needed capability. The solution is normally approved by the deputy SOCOM commander and funded by designated CMNS funding. If CMNS funding is not available, funding may be sourced from other programs.[34] The goal of the SOFCIDS-U is to field the solution within 180 days of CMNS submittal. The solution is planned to be sustainable for the duration of the need or one year, whichever is less.[35] Sustainment of the solution expires after one-year unless a Capability Development Document is approved through the normal SOFCIDS process. Other than the Joint rapid acquisition process, the SOFCIDS-U is the only process with a separate funding source. Also, after review of existing documentation, SOCOM rapid acquisition process has the most detailed and well-defined process.

[32] United States Special Operations Command Directive 71-4, *Special Operations Forces Capabilities Integration and Development System (SOFCIDS)*, 9 June 2009, 23.
[33] Ibid., C-7.
[34] Ibid., 23.
[35] Ibid., C-1.

The table below summarizes the numerous Joint, Army, Air Force, Navy, and SOCOM rapid acquisition processes.

	Joint	Army	Air Force	Navy	SOCOM
Rapid Acquisition Process Name	Joint Urgent Operational Need	Operational Needs Statement & Rapid Equipping Force	Rapid Response Process	Urgent Needs Process	SOFCIDS-U
Primary Document	CJCSI 3470.1 (15 Jul 05)	ECOP User's Guide	AFI 63-114 (12 Jun 08)	SECNAV Note 5000 (15 Mar 09)	USSOCCOM D 71-4 (9 Jun 09)
Approval	Budget Office Director Board	HQDA	CSAF	CNO	Deputy SOCOM
Funding	No specific fund	No specific fund	No specific fund	No specific fund	CMNS Fund
Timeline to IOC	IWN-120days JUON-120 days-2 yrs	REF-90-360 days ONS-90 days-2yrs	60 days	Less than 2 years	180 days-2 years
Solution Goal %	70-80%	80%	None specified	None specified	80%

Figure 2: Summary of Rapid Acquisition Processes

Defense Science Board Recommendations

Only five of the over 20 rapid acquisition processes have been discussed in this paper. As shown, there are numerous documents, timelines, definitions, approval authorities and funding sources for rapid acquisition. In response to the numerous processes, the Under Secretary of Defense for Acquisition, Technology, and Logistics, directed the Defense Science Board (DSB) to study the situation and present recommendations. In July 2009, the DSB published a study entitled, "Fulfillment of Urgent Operational Needs." The DSB made five specific recommendations for the DoD rapid acquisition process:

1. The Secretary of Defense should formalize a dual acquisition path (deliberate and rapid).
2. Executive and legislative branches must establish a fund for rapid acquisition and fielding.
3. The Secretary of Defense should establish a new agency: the Rapid Acquisition and Fielding Agency (RAFA).
4. Initial funding and billets for RAFA will be based on absorbing and integrating existing programs and organizations.
5. DoD should establish a streamlined, integrated approach for rapid acquisition.[36]

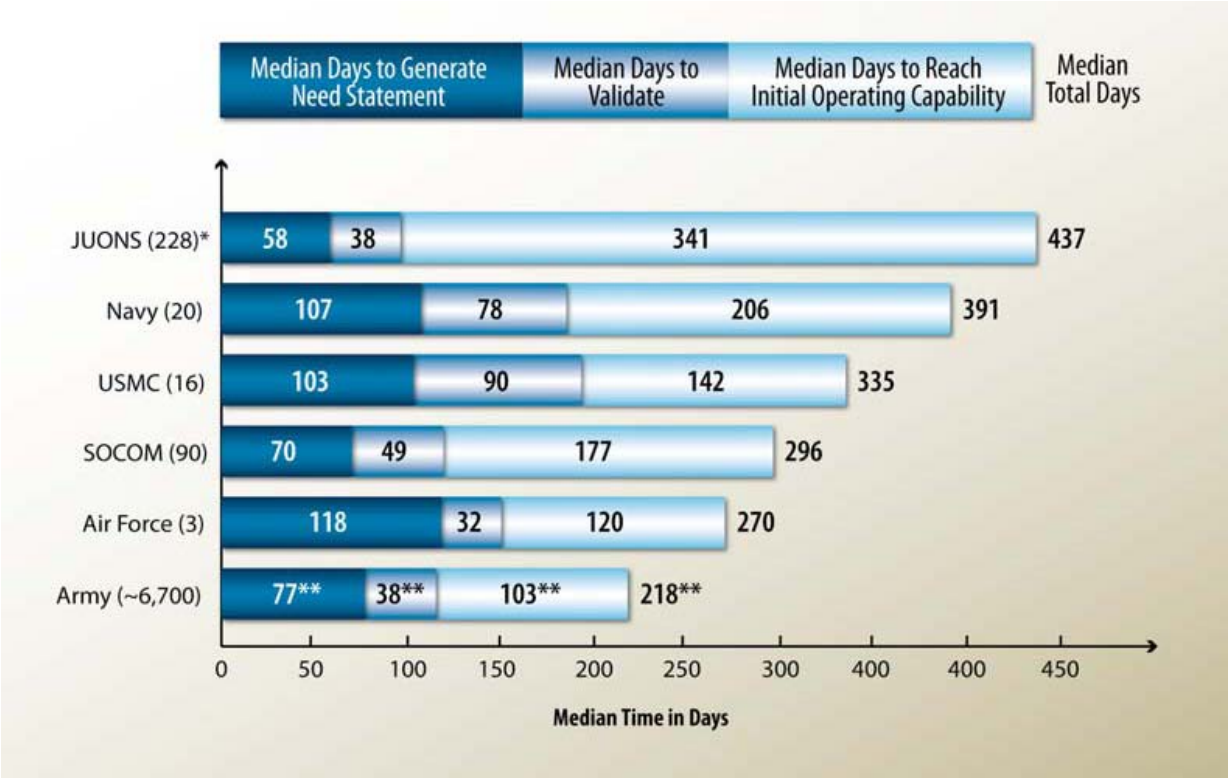
The DSB's final recommendation on "a streamlined, integrated approach for rapid acquisition" is the focus of this paper. The DSB highlighted the need for a process to validate the COCOM's request in 48 hours, then use a tightly coordinated acquisition and funding framework to meet the COCOM's need.[37] Specifically, under DSB's recommendations, RAFA would concurrently assign acquisition responsibility to an appropriate organization, analyze and approve funding and work with the COCOM for concept of operations (CONOPS) approval and IOC. This process would produce a solution for the COCOM within 2 to 24 months and is intended to have maximum flexibility to minimize time.[38] This paper suggests SOCOM's SOFCIDS-U process is the benchmark to fulfill this streamlined, integrated approach for all services. The strengths and weaknesses of SOCOM's rapid acquisition process will be discussed in the next section.

II. SOCOM's Rapid Acquisition Success

This section of the paper supports the first half of my thesis: SOCOM's rapid acquisition process offers a rapid acquisition benchmark, which should be adopted throughout the military.

[36] Defense Science Board Task Force Report, x-xii.
[37] Ibid, 39.
[38] Ibid, 39.

SOCOM's SOFCID-U process stands out for one main reason: results. Based on data collected by the DSB, if the goal of any urgent needs process is to get a capability into the warfighter's hands, the SOFCID-U process has the lowest time to initial operational capability (IOC) for the warfighter. The data below were submitted by each major rapid acquisition organization and compiled by the DSB.



* Numbers in parentheses indicate the number of need statements evaluated.

** More than 94 percent of Army ONS (~6,400) were for redistribution of inventory, which skews data to shorter times

FIGURE 3: Urgent Need Data[39]

The data indicate SOCOM's process takes an average of 296 days to become IOC. Upon initial investigation, it appears the Army takes the least time to IOC, however the Army process is skewed by 94% of the urgent needs being met by a redistribution of inventory. With only three UONS, the Air Force process does not meet requirements for statistical significance.

[39] Defense Science Board Task Force Report, 22.

Also, according to AFI 63-114, the Air Force goal is to fulfill the urgent need within 60 days and based on the three submitted UONs, it takes 118 days just to generate the need statement. With a lack of significant Army and Air Force data, SOCOM bears the shortest IOC time of 296 days. Although it appears SOCOM's process is the fastest based on technicalities, it is also the only service or combatant command process with a designated funding source and the Congressional authority to acquire their own solution. This frees SOCOM from bureaucracy that exists in the other processes. These strengths of fastest to IOC, designated funding, and the ability to acquire their own solution are not without a few weaknesses.

The weakness of the SOFCIDS-U process is that it is only intended to sustain a warfighter solution for one year. Other urgent needs processes did not specify a specific length of time for sustainment. Sustaining a solution for one year cuts down on the planning and scope required for the solution and decreases the time necessary to field the capability. However, this limits the ability to perform a "system of systems" approach to acquisition, especially in the area of logistics. Ultimately, the warfighter desires the capability solution to integrate into other warfighting systems to enhance mission effectiveness. The logisticians want the solution to integrate into the existing supply and sustainment system. The planning required for the complete "system of systems" acquisition approach does not meet the warfighter's urgent timeline. However, the warfighter knows the 80% solution now, is better than the 100% solution years from now. The compromise is that under the SOFCIDS-U process, if the solution needs sustainment beyond a year, a Capability Development (CDD) must be submitted and approved. Fortunately, the SOCOM CDD, under the SOFCIDs has fewer requirements than a CDD under the JCIDs process.

In summary, SOCOM's rapid acquisition process rises to the top based on IOC results data, specified funding, and the ability to manage their own acquisition. This makes SOCOM's SOFCIDS-U process a DoD benchmark for streamlined acquisition. Based on SOCOM's success, a similar process could be used to acquire and sustain a limited major weapon system.

III. TWO-YEAR LIMITED MAJOR WEAPON SYSTEM ACQUISITION

This section will discuss the entry criteria, some minor SOFSIDS-U additions, timeline, and funding changes to support the second part of my thesis. As a reminder, the second part of my thesis stated, SOCOM's rapid acquisition process could be used to acquire a limited major weapon system (MWS), for example a light attack aircraft, in less than two years. Research showed the Air Force has already accomplished something similar, which will be discussed below.

In a recent article, Gen Deptula, the current Vice CSAF for Intelligence, Surveillance, Reconnaissance (ISR), stated, "We need to make accelerated acquisition the norm. An example is the MC-12W [ISR aircraft]. The first was delivered in less than eight months."[40] The MC-12 Project Liberty was delivered in less than eight months from contract to combat missions. Gen Deptula goes on to say,

> "We are in an information age, but we have an industrial-age acquisition system. We have to be more agile in this regard because our adversaries are not limited by the same bureaucratic and legislative constraints that we have. Al Qaeda doesn't have a JCIDS (Joint Capabilities Integration and Development System) process. If we're going to succeed, we have to operate inside our adversaries' decision loop. To do that is going to require significant changes not just to the acquisition processes we built in the last century, but to our decision-making processes."[41]

[40] Dave A. Deptula, "Fast Forward," *Defense Technology International*, December 2009, 46.
[41] Ibid., 46.

Using streamlined acquisition processes, Big Safari, the Air Force's ISR program office, turned a COTS King Air into an ISR platform to meet the warfighter's need in under a year. Big Safari's success is built on having a small acquisition team closely integrated with a contractor, in this case, L-3 Communications Corporation. Unfortunately, this streamlined process has yet to be institutionalized for programs outside of Big Safari. The following topics will discuss some requirements for institutionalizing rapid acquisition.

Entry Criteria

To develop a limited MWS in under two years, the solution needs to meet three specific criteria: stable requirements, a COTS platform, and stable technology for systems integration. First, to meet an urgent warfighter need, the requirements need to be thoroughly vetted before acquisition and not change during the rapid acquisition process. SOCOM would be unable to achieve its average of 296 days to IOC with changing requirements. Second, the primary platform needs to be a COTS item, currently in production. For example, in the case of a light-attack weapon system, the primary platform could be the T-6 Texan II. The Air Force uses these aircraft for primary training and Hawker-Beach is still producing them. Third, any technology added to the weapon system needs to be stable technology. Using the Navy guidance for rapid acquisition, they would require an 8-9 technology readiness level (TRL) or better.[42] For example, in the case of weaponizing the T-6, a production Small Diameter Bomb would be integrated versus developing a new weapon.

SOFCIDS-U Additions

Minor additions to the SOFCIDS-U process is required to support two-year limited MWS acquisition. Currently, the SOFCIDS-U process does not mandate a systems engineering plan, which would outline the cradle to grave implications of the MWS and integration with other

[42] Secretary of the Navy Notice 5000, 12 March 2009, 5.

weapon systems. A systems engineering plan needs to be developed for any MWS. A subset of the systems engineering plan is the supportability plan. Currently, the SOFCIDS-U process only intends to support a solution for one year and does not include a robust sustainment plan. To support an MWS, a supportability plan would need to be developed for the intended life of weapon system. Although these two items would increase the planning time upfront, they would provide the warfighter a sustainable system into the future.

Timeline

The current SOFCIDS-U process delivers capability to the warfighter in an average of 296 days and Big Safari was able to deliver the MC-12 in under a year. The limited MWS acquisition team could use either process as a timeline model. The crucial factors for maintaining an acquisition timeline are a small team of highly experienced acquisition personnel with an intimate oversight relationship with the contractor. As an example, Big Safari assigns program office personnel to oversee their contractor, L3 Communications, in Greenville, Texas.

Funding

Rapid acquisition funding needs to be a priority for DoD and Congress. Currently, the SOFCIDS-U process uses CMNS funding specifically allocated to fulfill urgent needs. This should be accepted as the service model to fulfill urgent needs, including a limited MWS. Congress also provides the COCOM with the, "Combatant Commanders Initiative Fund (CCIF) as a means to fund unforeseen contingency requirements critical to combatant commanders' joint warfighting readiness and national security interests."[43] This fund is managed by J-7 and could be used as a source for a limited MWS. Institutionally, Congress has recognized the need for creating funding to meet urgent warfighting needs. However, other than SOCOM, no specific service is authorized such a fund, and normally resorts to sources from within their service to

[43] William Beasley, "Institutionalization of DOD Processes In Support of Immediate Warfighter Needs," 15.

meet warfighter needs. The practice of robbing other programs to pay for urgent needs disrupts other acquisition programs and ultimately increases the cost to the taxpayer. The DSB recommended 0.5% of the DoD budget be set aside for rapid acquisition, and such a fund could be used to fund a limited MWS.[44] The key for funding a limited MWS would be military transparency with Congress on how the money is managed and spent.

To summarize, the SOFCIDS-U provides a model for acquiring a limited MWS, but not the only model. Big Safari's acquisition process could also be leveraged to acquire an MWS, provided the MWS met specific entry criteria, incorporated systems engineering planning, maintained an intimate contractor relationship, and the team worked with Congress on funding.

RECOMMENDATIONS

Based on research, I propose three recommendations.

1. **Rapid acquisition must be consolidated into one process.** I agree with the DSB findings, that over 20 rapid acquisition processes are unwieldy and redundant. As shown, with the myriad of terms and processes between SOCOM, the AF, Navy and Army, rapid acquisition is disjointed and inefficient. Like the DSB, I recommend creating and codifying a separate deliberate and rapid acquisition system. This would identify a single rapid acquisition process and bring clarity to cloudy process and funding issues.

2. **SOCOM's rapid acquisition process should be used as a benchmark**. SOCOM's SOFCIDS-U process offers a streamed-lined acquisition process with proven delivery to the warfighter. SOCOM's process should be adopted by OSD as the single rapid acquisition process.

3**. Future acquisition of limited major weapons systems (e.g. light attack aircraft) should use rapid acquisition processes**. Acquisition of a limited MWS to support the warfighter

[44] Defense Science Board Task Force Report, 33.

should use a rapid vs. deliberate acquisition process. Taking five, ten, or twenty years to field a system is unacceptable in today's rapidly changing environment. Our acquisition system must adapt to defeat the threat. MWSs that meet specific entry criteria: stable requirements, COTS platform, and mature systems integration (8-9 TRL), should be considered for rapid acquisition. The SOFCID-U or Big Safari processes offer benchmarks for limited MWS acquisition.

CONCLUSION

In 2008, the Government Accounting Office published four main causes for defense acquisition delivering warfighter capabilities an average of 21 months late: unstable requirements; frequent program manager turnover; over-reliance on contractors to perform roles previously performed by government employees; and difficulty managing software.[45] While DoD attempts to transform deliberate acquisition to repair the afore mentioned problems, the need for rapid acquisition to support the warfighter has been recognized. Although the F-35 is in its 12th year of development with IOC still years away, rapid acquisition success exists with programs like the MRAP and MC-12. All services desire to get the necessary equipment into the warfighter's hands to defeat the enemy, but no DoD institutionalized processes exists for this critical endeavor.

This paper outlined the difference between deliberate and rapid acquisition; discussed the Joint, Army, Air Force, Navy, and SOCOM rapid acquisition processes; argued the success of the SOCOM model; and explored the possibility of acquiring a limited MWS with a rapid acquisition process. My thesis was SOCOM's rapid acquisition process offers a rapid acquisition benchmark, which should be adopted throughout the military and SOCOM's rapid acquisition process could be used to acquire a limited major weapon system (e.g. a light attack

[45] United States Government Accounting Office, "Defense Acquisitions: Results of Annual Assessment of DoD Weapon Programs," Congressional Testimony, 29 April 2008, GAO-08-674T, 2-3.

aircraft) in less than two years. The limited data showed that SOCOM's rapid acquisition process consistently fulfills urgent needs in the least amount of time, 296 days. However, when proposing a process to acquire a limited MWS, both SOCOM and Big Safari stand out as best practices.

This paper made three specific recommendations: rapid acquisition must be consolidated into one process; SOCOM's rapid acquisition process should be used as a benchmark; and future acquisition of limited major weapons systems (e.g. light attack aircraft) should use rapid acquisition processes. These recommendations are congruent with Defense Secretary Robert Gate's comments during a speech in July, 2009,

"…the Defense Department needs to think about and prepare for war in a profoundly different way than what we have been accustomed to throughout the better part of the last century. What is needed is a portfolio of military capabilities with maximum versatility across the widest possible spectrum of conflict. As a result, we must change the way we think and the way we plan - and fundamentally reform - the way the Pentagon does business and buys weapons."[46]

Changing the way the Pentagon buys weapons is crucial to our national security. Using SOCOM's processes as a model is a proven way to meet the warfighter's needs, and posture our military's acquisition system to defeat future threats.

[46] Robert Gates, Speech Delivered to the Economic Club of Chicago, 16 July 2009, http://www.defenselink.mil/speeches/speech.aspx?speechid=1369.

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GLOSSARY OF TERMS

ATF--Advanced Tactical Fighter
BES—Budget Estimation Submission
CCD--Combat Capability Document
CDD--Capabilities Development Document
CJCSI--Chairman of the Joint Chiefs of Staff Instruction
CMNS--Combat Mission Needs Statement
COCOM—Combatant Command
COTS-Commercial-off-the-Shelf
CNO—Chief of Naval Operations
CSAF—Chief of Staff of the Air Force
DoD—Department of Defense
DSB—Defense Science Board
ECOP—Equipment Common Operation Picture
GOTS-Government-off-the-Shelf
HQDA--Headquarters, Department of the Army
IED—Improvised Explosive Device
ISR--Intelligence, Surveillance, Reconnaissance
IWN—Immediate Warfighter Need
IOC--Initial Operational Capable
JCIDS—Joint Capability Integration Development System
JRAC—Joint Rapid Acquisition Cell
JROC—Joint Requirements Oversight Council
JUONS-Joint Urgent Operational Need Statement
MRAP--Mine Resistant Ambush Protected
MWS—Major Weapons System
OMB—Office of Management and Budget
ONS—Operational Need Statement
OSD—Office of Secretary of Defense
POM—Program Objective Memorandum
PPBE—Planning, Programming, Budgeting and Execution
RDD—Rapid Development and Deployment
REP—Rapid Equipping Force
RRP—Rapid Response Process
SIPRNET--SECRET Internet Protocol Router Network
SOCOM—Special Operations Command
SOFCIDS--Special Operations Forces Capabilities Integration and Development System
SOFCIDS-U--SOFCIDS Urgent
UNP—Urgent Needs Process
UONS--Urgent Operational Need Statement